Work Order ID 105722 August-15-13 3:20:54 PM	\(\sigma^{\sigma}\)		*105	572	2*							Page
Item ID: D3121-241 Revision ID: Item Name: Bearing Assembly	51.0 4	Ac	ccept	*\	1900	040	100)*	Setup	Start Stop	*N:	S1* S2*
	t Qty: 30,00 d Qty: 20.00	*30* *30*			Cust Item II Customer:	D:					ı v.	
Approvals: Process Plan:		13-08-16	Fooling:			te:			Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Oper. Work Center ID Descr Draw Nbr Revision N	iption		Set Up/ Run Hours		Tool ID	Tool#	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp
D3121 Rev E												
*100 *100 Hardinge Hardinge CNC Lathe Small	nge CNC LATHE SMALL Memo 1-Tum D3121-25 Cap	as per Folio FA3872	0.00 0.00 A 2-Deburr 9-	S A ®	3/08/2	28		Sj		<u>6</u>		-
110 QC2-1 *110* QC QC Quality Control	Inspect parts off machine FA	l/FAIB	0.00	PS QQ 9-8	13/08/	2 8		<u> 51</u>		<u>s</u> .		-
120 QC8-1 *1.20* QC ,	Inspect parts - second check		0.00	J.a	13 08 2	. 4		51		¢	•	1 0A5 1 08

Quality Control

NCR: Y	es/	/ No				WORK ORDER NON-	COI	VFORM	AANCE / UPDAT			_	
<u> </u>						,					QA Closed:	Date:	
Work Orde	٠r٠					DISPOSITION			A	GAINST DEI	PARTMENT	/PROCESS	
Part N	- . No.					Rework Scrap Use-as-is Work Order Update		í	Machining Si noforming F	rosstube mall Fab inishing mposite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root	ī				Descri	ption of work order update	\top	Initial	Action	_	Sign &		
Cause		Date	Step	Qty	,	or Non-conformance	Ch	ief Eng	Descriptio	n	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved					·			·					
						Į.	AUI	T CATE	GORY				
Landi	$\overline{}$	Gear Bending				General Bend		Grain			Ovalized		Pressure/Forced
		Centre No Cracks Crushed/		ntric to	o/s	BOM/Route Broken/Damaged Burrs		Instruct	on Incomplete ions Incomplete/Uncle	ar	Over/Under Part Incorred Part Lost/Mi	ct	Temperature/Cure Weid Wrong Stock Pulled
		Cuffs Heat Trea Inspectio		Tube		Contamination Countersink Cut Too Short		Mainte Mislabe Misread	eled		Part Moved Positioned V Power Loss/		Other
		Ripples ir Torque V		xtrusio	n	Drill Holes Drawing	E	-1	Calibration				
1		Turning S	equence			Finish		Out of 9	Sequence				

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ordo				*1	ი57:	22*							Page 2
Item ID: Revision ID: Item Name:	D3121-2			Accept	*	N900	040	100	ገ*	Setup	Start Stop	130	S1* S2*
Start Date: Required Date: Reference:	8/15/13	Start Qty: 30.00 Req'd Qty: 30.00	*30* *30*			Cust Item I Customer:	ID:					IV.	
Approvals:	Process	s Plan:	Date:	Tooling:		Da	ate:			Run	Start	*N	R1*
	QC:_		Date:	SPC (Y/N):		Da	ate:				Stop	*N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hou	urs	Tool ID	Tool #	Plan Code	Accep Qty	t Rej Qty		Reject Number	Insp. Stamp
130 Small Fab Small Fab		Small Fab Memo 1-Press D312	21-23 Bearing into D3121-	0.00 25 Cap as per Dw	vg D3121				5/2	<u> </u>			Dy'i
¹⁴⁰ *1 ⊿ በ*		QC5- inspect part comple	eteness to step on W/O	0.00	A.5 21				SI				
QC Quality Control		Memo		0.00 13	, 99			((du/)			·—···········	,
*150		Identify as per dwg & Sto	ick Location: <u>512</u> 35	0.00					51	\ \	As 2B	17	n
Packaging		Memo		0.00						X		13-0	7-5

Memo

Packaging

NCR: Y	'es /	No				WORK ORDER NON-C	CON	NFORM	MANCE / UP	DATE	QA Closed:	Date	
						DISPOSITION	\Box			AGAINST DE			
Work Orde	er:		.=.				, I				1		
Part N						Rework Scrap Use-as-is		t Therm	Skid-tube Machining Moforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
NCR N	NO					Work Order Update	ا ا		Large Fab	Composite	j	Supplier [_	
Root					Descri	ption of work order update	1	nitial	Ac	tion	Sign &		
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data			·										
Equip/Tooling													
Operator								į					
Material													
Setup								Ì					
Other													
Process]		
Supplier							l						
Training													
Unapproved								% /i_	_				
					<u></u>	F	AUL	T CATE	GORY				
Landi	ng Gea	r				General		44		_	_	_	_
	Ве	nding				Bend	Ш	Grain			Ovalized	L	Pressure/Forced
,	Ce	ntre No	t Concer	ntric to (o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	☐ Cr	acks				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	t	Weld
	Cr	ushed/0	Crimped			Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	□ Cu	ffs	p t			Contamination		Mainte	enance		Part Moved		
	Пне	at Trea		-		Countersink		Mislabe	eled		Positioned V	/rong	_
	In:	spection	n Strip in	Tube		Cut Too Short		Misread	j		Power Loss/	Surge	Other
	Ri	oples in	Bend			Drill Holes		Offset					
	Пто	raue W	aves in E	xtrusion	, <u> </u>	Drawing		Out of O	Calibration			_	

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde August-15-13 3		95722		*10.5	5722*							Page	3
Item ID: Revision ID: Item Name:	D3121-241 Bearing Asse	mbly		Accept	*N900	040	100)*	Setup	Start Stop		S1* S2*	<u> </u>
Start Date: Required Date: Reference:	8/15/13 8/29/13	Start Qty: 30.00 Req'd Qty: 30.00	*30* *30*		Cust Item 1 Customer:	D:							
Approvals:	Process Pla	an:	Date:	Tooling:	D:	ate:	_		Run	Start	*N	R1*	
	QC:		Date:	SPC (Y/N):	D:	ate:				Stop	*N	R2*	
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	t Re	-	Reject Number	Insp. Stamp	
160		QC21- Final Inspection -	Work Order Release	0.00						13/0	la	10	
160		Memo		0.00						1/1		17)	-

Quality Control

d 13-09-4

			DQA:	Date:
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE		
		•	0.4.61	0

											QA Closed:	Da	te:	_
Work Orde	5 r ·					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Part N	۔ ِ No.			· · ·		Rework Scrap Use-as-is Work Order Update			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Other
Root					Descri	ption of work order update	Ī	nitial	Act	tion	Sign &			
Cause	1	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verificatio	n	QC Inspector
Doc/Data				<u> </u>		-					•			
Equip/Tooling		ı									<u> </u>			
Operator														
Material		ı												
Setup				ļ										
Other													İ	
Process			Ì											
Supplier	<u> </u>				i									
Training			1.	1										
Unapproved			<u>. </u>	<u> </u>			<u> </u>			_				
					 .		AUL	T CATE	GURY					<u></u>
Landi	_					General		Grain		_	Ovalized		<u> </u>	Pressure/Forced
1		Bending			_	Bend BONA/Bouts	\vdash	Hardwa		. ⊢	Over/Under	toloranco		Temperature/Cure
Ì	-	Centre No Cracks	ot Concei	ntric to	^{0/3} -	BOM/Route Broken/Damaged	\vdash		ire ion Incomplete	 	Part Incorre		-	Weld
1	├	Cracks Crushed/	Crimpad		-	Burrs	-		cions Incomplete/	Unclear	Part Lost/Mi			Wrong Stock Pulled
	\vdash	Cuffs	Cimiped		<u></u>	Contamination		Mainte	•		Part Moved	=		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	H	Heat Trea	at			Countersink		Mislabe			Positioned V			
	\vdash	Inspectio		Tube		Cut Too Short		Misrea		<u> </u>	Power Loss/	=	\Box	Other
	\vdash	Ripples in	-		<u> </u>	Drill Holes		Offset		L	· ·	-		
	\vdash	Torque W		Extrusio	n	Drawing		Out of	Calibration					
	厂	Turning S				Finish		Out of	Sequence			_		
•		Wave/Tw	vist in Tul	be		Folio		Outside	Dimensions					

Picklist Print August-15-13 3:20:58 PM Work Order ID: 105722 D3121-241 Parent Item: Parent Item Name: Bearing Assembly Comments:

105722

D3121-241

Start Date: 8/15/13

Required Date: 8/29/13

Page 1

Start Qty: 30.00

Required Qty: 30.00

IPP Rev:A04.02.18New issueKJ/DS

	IPP Rev:B ECN I	060 07-11-12	DD	verified by:E0	C								
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDELRINR1.000		Purchased	No			100	f	4.2650	0.052	1.56			
MDFLR	INR1 000)							**				
Delrin Round Bar 1"						•	D	1 6.1.					
				Location	-	Loc		Loc Code			OPS		- 1 - 1
				MAT018			.265 .265		-	- 91S	- \AA 9-6 ⁹		13/08/
D3121-23		Manufactured	No	*	125251	130	Each	25.0000		30	- \ 9-89	/	/
	20+	Manufactured							**	30	1/1	. /	0/1
*D3121-2	7.3°										4 Ju	3 / 0	7/04
Bearing				Location	1	Loc	<u>Oty</u>	Loc Code				/	
				ST			11				_		
					102140		11		_		_ /	1	11
				ST235			14		_		- <i>B</i>	105	757
					66734		10		_		_ 🕖	100	
					75084		2				_		~ <i>)</i>)

DQA:	<u> </u>	Date:	:		<u>.</u>							•	N ART
QA Closed:		Date:	•		WORK ORDER NON	-C(ONFO	RMANCE / I		Vork Order up	odate only	\neg	AEROSPACE
Work Order	··				DISPOSITION					EPARTMENT			
Part No	0			-	Rework Scrap Use-as-is Suspected Unapproved			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	_	Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Other
Root				Desc	ription of work order update	1	nitial	A	ction	Sign &	<u> </u>	П	
Cause	Dat	e Step	Qty		or non-conformance	CH	nief Eng	Des	cription	Date	Verification	١	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved													
					· · · · · · · · · · · · · · · · · · ·	FA	ULT CAT	regory	<u> </u>				
Landing	Bendi Centro Crack. Crimp Cuffs Crush Heat Inspection	Not Conce Kink/Ripple rng reat ction Strip in /Chatter ng Sequence	e/Wave		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	ion Incomplete/li ions Incomplete Ined/off center	/Unclear	Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ct ssing Vrong		Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
	Wave	Twist in Tu	be	I	Fit/Function	1 _	Out of s	Sequence					

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

DART AEROSPACE LTD	Work Order:	105722
Description: Cap	Part Number:	D3121-25
Inspection Dwg: D3121 Rev: E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article		Prototype
---	---------------	--	-----------

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.315	+/-0.010	P18.	1		FK-04	Vern.
Ø1.000	+/-0.010	0.00	7		(is
Ø0.838	+/-0.002	e 838	7			1.
R0.063	+/-0.010	.063	\		R-G	
R0.010	+/-0.010	0010	/		fi	
0.230	+/-0.001	~530	1		FK-04	Vern
Ø0.865	+/-0.001	708, ass	7		l)	4
	-		l.			
						·
			-			
						-

CAS I				
Measured by: AA	Audited by:	D-A DAG	Prototype Approval:	N/A
Date: 13/08/28	Date:	13/08/29 289	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	04.04.20	New Issue (P/O D3121-241)	KJ/RF	
В	06.06.09	Ø1.000 diameter was Ø1.024	KJ/JLM	
С	08.01.16	Dwg Rev. updated	KJ/EC/DD	X

DQA:			Date:												JAPT
						WORK ORDER NON	I-C	ONFO	RMANCE / U	PDATE					AEROSPACE
QA Closed:			Date:								Work	Order u	odate only		
Work Orde	er:					DISPOSITION		ĺ		AGAINST	DEPAR	RTMENT	/PROCESS		
	-					Rework	7		Skid-tube	Crosstube			Water Jet		Engineering
Part N	lo.					Scrap	1		Machining	Small Fab		Pro	d. Eng. Coor.	\vdash	Quality
			•	_		Use-as-is	1	Therr	noforming	Finishing			re/Packaging	$\overline{}$	Other
NCR N	lo				<u> </u>	Suspected Unapproved]		Large Fab	Composite		•	Supplier		
Root					Desci	ription of work order update	Τ	Initial	Act	ion	S	ign &			•
Cause	Da	te	Step	Qty		or non-conformance	Ct	nief Eng	Descr	ription		Date	Verificatio	ก	QC Inspector
Design	_			,										-	
Doc/Data	_										-				
Equip/Tooling													!		
Handling/Pre															
Material															
Operator	[,					ļ						
Offset/Setup															
Process															
Supplier															
Training															
Transport															
Unapproved															
<u> </u>							FA	ULT CAT	regory	·					
Landin	ig Gear					General		_		_		 -			
Į	Bend	ling				Bend		Folio/P	rogram	· [Out	tside Dim	ensions		Pressure/Forced
Į	Cent	re Not	t Concen	ntric		BOM/Route		Grain			Ove	er/Under	tolerance		Set-up
L	Craci	ks				Broken/Damage/Defect		Hardwa	ire		Par	t Incorre	ct		Temperature/Cure
L	Crim	p/Kinl	c/Ripple,	/Wave		Burrs		Inspecti	ion Incomplete/Ur	nqualified	Par	t Lost/Mi	issing		Weld
Ĺ	Cuffs	5				Contamination		Instruct	ions Incomplete/U	Jnclear	Par	t Moved			Wrong Stock Pulled
[Crust	hing				Countersink		Misalig	ned/off center		Pos	itioned V	Vrong		-
[Heat	Treat				Cut Too Short		Mislabe	eled		Pov	ver Loss/	Surge		Other
	Inspe	ection	Strip in	Tube		Drawing		Misread	d .	_					
[Mark	ks/Cha	itter			Drill Holes		Off-set							
[Turn	ing Se	quence			Finish		Out of 0	Calibration						
	Wave	e/Twis	st in Tub	e		Fit/Function		Out of	Sequence						



DESIG	4	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHEC	KED	APPROVED	DRAWING NO. REV. E
	#	#	D3121 SHEET 1 OF 10
DATE			TITLE SCALE
07.1	11.07		BRACKET ASSEMBLY 1:2
Α		02.04.15	NEW ISSUE
В		03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146
С		04.02.17	ADD CLEARANCE; USE -241 BEARING
D		06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000
Ε		07.11.07	ADD TOLERANCE TO 0.032 (DETAIL B)



- D3121-2	21 BOLT	(1)
D3121-2	241	
BEARING	ASSEMB	LY (1)

D3121-041 BRACKET ASSEMBLY

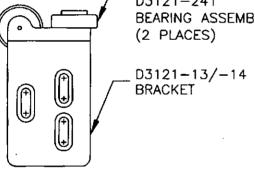
(REPLACES PREMIER P/N B30-23000-33)

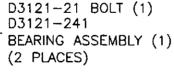


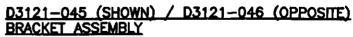
D3121-21 BOLT (1) D3121-241 BEARING ASSEMBLY (1) (2 PLACES)

D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY

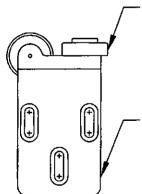
(REPLACES PREMIER P/N B30-23000-37/-38)







(REPLACES PREMIÈR P/N B30-23000-35/-36)



D3121-15/-16 BRACKET

Copyright © 2002 by DART AEROSPACE LTD

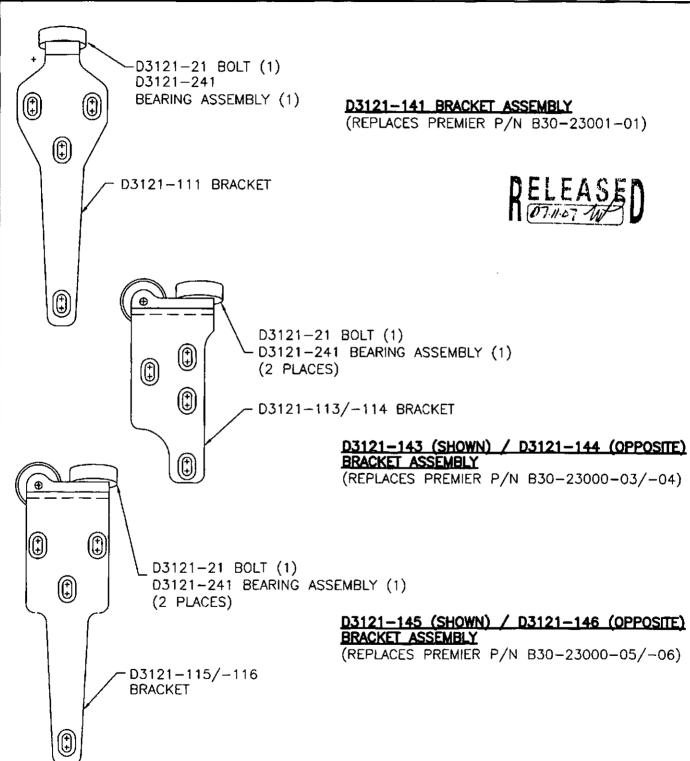
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DQA:		_ Date:			WORK ORDER NON-	-C	ANE(A)	DNANCE / II	DDATE				*DART
QA Closed:		Date:				-c(MVIANCE / O	PDATE	Work	Order up	odate only	AEROSPACE
Work Orde	ar.				DISPOSITION				AGAINST	DEPA	RTMENT	/PROCESS	
					Rework			Skid-tube	Crosstube	⊢—		Water Jet	Engineering
Part N	lo				Scrap			Machining	Small Fab			d. Eng. Coor.	Quality
NCR N	lo	<u> </u>			Use-as-is Suspected Unapproved		Thern	noforming Large Fab	Finishing Composite	\vdash	Rec/Sto	re/Packaging Supplier	Other
Root				Desc	ription of work order update		nitial	Ac	tion		Sign &		
Cause	Date	Step	Qty	}	or non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	QC Inspector
Design Doc/Data													
Equip/Tooling													
Handling/Pre												<u>.</u>	
Material													
Operator													
Offset/Setup													
Process				ļ						1			
Supplier	7												•
Training													
Transport		-										:	
Unapproved				ŀ									
						FAI	ULT CAT	EGORY					
Landir	ng Gear				General								
	Bending				Bend		Folio/P	rogram		O	ıtside Dim	ensions	Pressure/Forced
į	Centre N	Not Conce	ntric		BOM/Route		Grain			0	er/Under	tolerance	Set-up
	Cracks				Broken/Damage/Defect		Hardwa	re		Pa	rt Incorrec	ct	Temperature/Cure
	Crimp/K	ink/Ripple	/Wave		Burrs		Inspecti	on Incomplete/U	nqualified	Pa	rt Lost/Mi	ssing	Weld
	Cuffs			L	Contamination		Instruct	ions Incomplete/l	Unclear	Pa	rt Moved		Wrong Stock Pulled
	Crushing	3			Countersink		Misalig	ned/off center		Po	sitioned V	Vrong	_
ļ	Heat Tre	eat			Cut Too Short	L	Mislabe	led		∐_Pc	wer Loss/	Surge	Other
		on Strip in	Tube		Drawing		Misread	1		_			
ļ	Marks/C				Drill Holes	L	Off-set						
ļ	Turning	Sequence			Finish		Out of (Calibration					
l	Wave/Tr	wist in Tub	oe -	- 1	Fit/Function		Out of S	equence					

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA





DESIGN

DATE

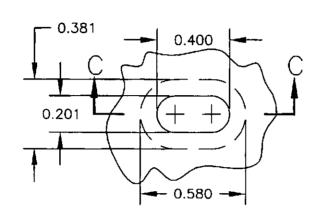
DRAWN BY

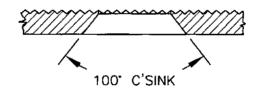
DQA:	_	Date:	:	<u></u>								[™] ⊃∧ DT
QA Closed:		Date:			WORK ORDER NON	-C(ONFO	RMANCE / UPDATI		ork Order ug	odata only	AEROSPACE
Qri closeu.										-	·	<u> </u>
Work Orde	er:				DISPOSITION			AGA	AINST DE	PARTMENT,	/PROCESS	
					Rework]		Skid-tube Cros	stube		Water Jet	Engineering
Part N	lo				Scrap			Machining Sma	all Fab	Pro	d. Eng. Coor.	Quality
		_	_		Use-as-is		Therr	noforming Fini	ishing	Rec/Stor	re/Packaging	Other
NCR N	lo			_	Suspected Unapproved]		Large Fab Comp	posite	J	Supplier	
Root				Desci	ription of work order update		Initial	Action		Sign &	<u> </u>	
Cause	Date	e Step	Qty		or non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector
Design							·					
Doc/Data												
Equip/Tooling	_											
Handling/Pre		İ										
Material		Ì										
Operator												
Offset/Setup	_	ŀ								İ		
Process												
Supplier	_	-										
Training												
Transport												
Unapproved	L		<u></u>									
			·			FA	ULT CA	TEGORY				
Landin r	ng Gear			_	General	_	-		_	1	_	7
	Bendir	_		ļ	Bend	Ļ	1	Program	<u> </u>	Outside Dim	 	Pressure/Forced
	_	Not Conce	ntric	ļ	BOM/Route	<u>_</u>	Grain			Over/Under	tolerance	Set-up
	Cracks			<u> </u>	Broken/Damage/Defect	L	Hardwa		<u> </u>	Part Incorred	ļ	Temperature/Cure
1	-	/Kink/Ripple	e/Wave		Burrs	上	Inspect	ion Incomplete/Unqualifie	·d	Part Lost/Mi	ssing	Weld
-	Cuffs			<u> </u>	Contamination	_	4	tions Incomplete/Unclear	<u> </u>	Part Moved		Wrong Stock Pulled
ļ	Crushi	_			Countersink	igspace	1 1	gned/off center	<u> </u>	Positioned W		_
ļ	Heat T			<u> </u>	Cut Too Short	igspace	Mislabe			Power Loss/:	Surge	Other
1	─	tion Strip in	Tube	<u> </u>	Drawing	$oxed{oxed}$	Misread	t				
Ļ	_	/Chatter		<u> </u>	Drill Holes		Off-set					
1		g Sequence		<u> </u>	Finish		Out of	Calibration				
1	Wave/	Twist in Tul	be	-	Fit/Function		Out of	Sequence				



DESIGN	DRAWN BY	DART AEROSP HAWKESBURY, ONTAR	· ·
CHECKED	APPROVED	DRAWING NO.	REV. E
1 4	一	D3121	SHEET 3 OF 10
DATE	1-4	TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:1

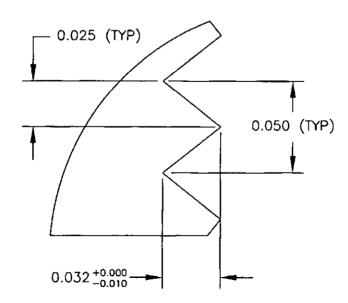
DETAIL A: SLOT DETAIL SCALE 2:1 VIEW ROTATED





RELEASED

<u>DETAIL B:</u> RIDGE DETAIL PARTIAL SECTION SCALE 1:20



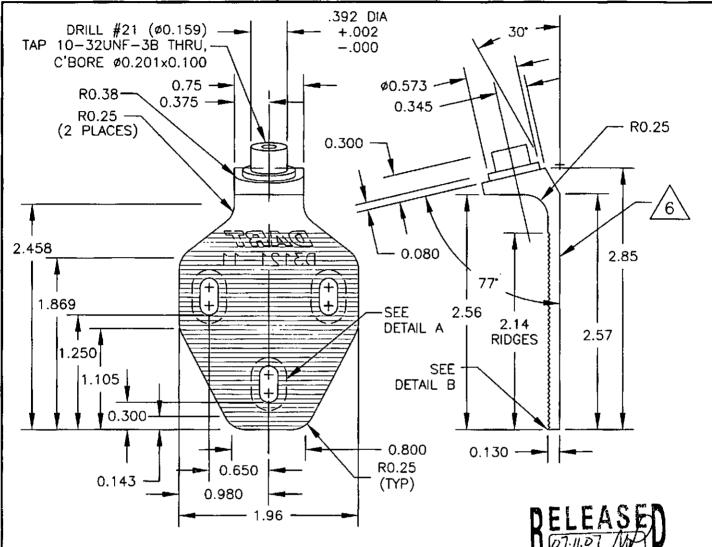
Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DQA:		Date:										™ ∆ A D T
QA Closed:		Date:			WORK ORDER NON	-C(ONFO	RMANCE / UPDAT		ork Order up	odate only	AEROSPACE
					DISPOSITION			AG		PARTMENT		
Work Orde	er:				_ ر	1		a				٦
Down N	1_				Rework	1		 !	sstube	Desc	Water Jet	Engineering
Part N				_	Scrap Use-as-is	-		~ —	all Fab nishing		d. Eng. Coor. e/Packaging	Quality Other
NCR N	In				Suspected Unapproved		Hieri	·H	posite	nec/stor	Supplier	
110.11				—	Saspected Onapproved			Edige rabi com	.posite		anbbuc. F	
Root				Desci	ription of work order update		Initial	Action		Sign &		
Cause	Date	Step	Qty		or non-conformance	Ct	nief Eng	Description		Date	Verification	QC Inspector
Design												
Doc/Data									•			
Equip/Tooling									•			
Handling/Pre	_											
Material												
Operator	_											
Offset/Setup	_	1										•
Process												·
Supplier												•
Training	_											,
Transport	_	1										1
Unapproved						<u> </u>						1
				-	 	FA	ULI CA	TEGORY			 .	
Landir	ng Gear	_		_	General]	.		la	. г	7
}	Bending	; Not Conce:	ntric		Bend BOM/Route	\vdash	-1	Program	⁻	Outside Dim	⊢	Pressure/Forced
ŀ	Cracks	NOT COLICE	THIC	-	Broken/Damage/Defect	├	Grain Hardwa)	<u>-</u> -	Over/Under Part Incorred		Set-up Temperature/Cure
ŀ		(ink/Ripple	Maya	-	Burrs	-	4	ire ion Incomplete/Unqualific	<u> </u>	Part Lost/Mi		Weld
ļ	Cuffs	and apple	., wave	 -	Contamination	-	1	tions Incomplete/Unclear	-	Part Moved	- Sallig	⊢
ŀ	Crushin	p			Countersink	\vdash	- 4	gned/off center	F	Positioned W	/rong	Wrong Stock Pulled
ŀ	Heat Tre	_			Cut Too Short	H	Mislabe		-	Power Loss/	· -	Other
}	_	on Strip in	Tube		Drawing	\vdash	Misrea		L	. 5440, 2033/.		Tource .
ľ	Marks/0	-		-	Drill Holes		Off-set					
ŀ		Sequence			Finish	一	4	Calibration				
		wist in Tuk			Fit/Function		┥	Sequence			·	



	DESIGN #	DRAWN BY		EROSPACE LTD URY, ONTARIO, CANADA
	CHECKED	APPROVED	DRAWING NO.	REV. E
	#	- #-	D3121	SHEET 4 OF 10
ł	DATE		TITLE	SCALE
	07.11.07		BRACKET ASSEME	3LY 1:1



D3121-11 BRACKET

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
 MIN ULTIMATE TENSILE = 150 ksi
 MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

Copyright @ 2004 by DART AEROSPACE LTD

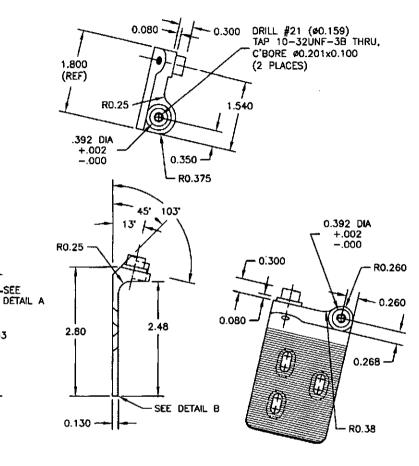
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

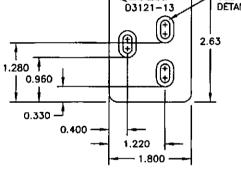
DQA:		Date:											DADT
QA Closed:		Date:			WORK ORDER NON	-C(ONFO	RMANCE / UPDATE		ork Order uj	ndate only	_	AEROSPACE
QA CIOSCO.			****					<u> </u>		•			
Work Orde	er:				DISPOSITION			AGA	INST DE	PARTMENT	/PROCESS ·		
					Rework			Skid-tube Cross	tube		Water Jet		Engineering
Part N	No				Scrap			Machining Small	l Fab	Pro	d. Eng. Coor.		Quality
					Use-as-is		Therr	moforming Finis	hing	Rec/Sto	re/Packaging		Other
NCR N	No	<u> </u>			Suspected Unapproved	<u> </u>		Large Fab Compo	osite	J	Supplier		
Root				Desc	ription of work order update		Initial	Action		Sign &			
Cause	Dat	e Step	Qty		or non-conformance	Ch	nief Eng	Description		Date	Verification		QC Inspector
Design													
Doc/Data			-										
Equip/Tooling													
Handling/Pre			1										
Material			ļ		!							-	
Operator	<u></u>												
Offset/Setup													
Process		.]											
Supplier											•		
Training													
Transport	'	ĺ	ļ		,	1							
Uпарргоved										<u> </u>			
		_				FA	ULT CA	TEGORY					
Landi	ng Gear				General	_	,			7	_		
	Bendi	_			Bend	<u> </u>	1 '	Program		Outside Dim	ensions	_	ressure/Forced
		e Not Conce	ntric		BOM/Route		Grain			Over/Under	tolerance		et-up
	Crack				Broken/Damage/Defect	匚	Hardwa	are		Part Incorred	et L	T6	emperature/Cure
		/Kink/Ripple	e/Wave		Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	\w	/eld
	Cuffs			<u> </u>	Contamination	L	4	tions Incomplete/Unclear		Part Moved		\w	rong Stock Pulled
	Crush	ing			Countersink	<u>L</u>	Misalig	gned/off center	L	Positioned V	Vrong		
	Heat 1				Cut Too Short		Mislabe	eled		Power Loss/	Surge	0	ther
		tion Strip in	Tube		Drawing	L	Misrea	d					
	Marks	/Chatter			Drill Holes		Off-set						
	_	ng Sequence			Finish		Out of	Calibration					
ł	Wave	/Twist in Tul	эe	ļ	Fit/Function	_	Out of	Sequence					



DESIGN	DRAWN BY	DART AEROSP HAWKESBURY, ONTARI	
CHECKED	APPROVED	DRAWING NO.	REV. E
4	-t t	D3121	SHEET 5 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2







8

DAVST!

∕₃∖

D3121-13 BRACKET (SHOWN) D3121-14 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
 MIN ULTIMATE TENSILE STRENGTH = 150 ksi
 MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

Copyright @ 2002 by DART AEROSPACE LTD

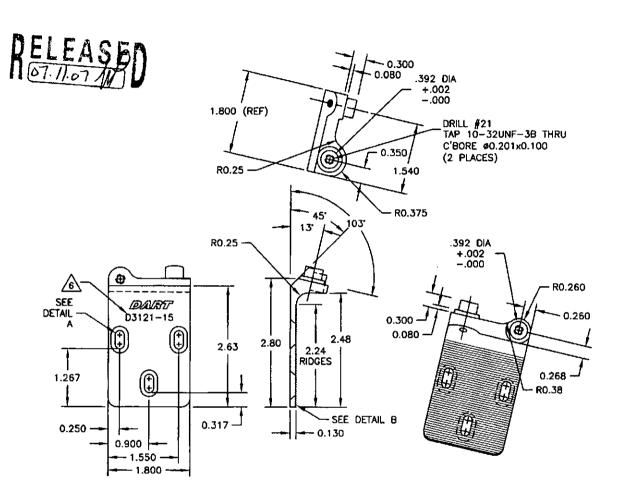
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

22£501

DQA:			Date:	<u></u>		WORK ODDER NON	*	`DART							
QA Closed:			Date:			WORK ORDER NON-		JNFUI	RIVIAINCE / U		Wor	k Order up	odate only		AEROSPACE
Work Orde) F.				<u> </u>	DISPOSITION			•	AGAINST I	DEP/	ARTMENT	/PROCESS		
Part N	- lo	-				Rework Scrap Use-as-is		l	Skid-tube Crosstube Machining Small Fab Thermoforming Finishing		Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier		d. Eng. Coor.		Engineering Quality Other
NCR N	10		<u></u>			Suspected Unapproved Large Fab Composit				Composite					
Root		Date Step Qty		Desc	ription of work order update or non-conformance	ı	nitial iief Eng		tion ription		Sign & Date	Verification		QC Inspector	
Cause Design	\dashv	Date	эсер	Qty		or non-comormance	CII	liei cug	Desci	прион	+	Date	verilleation	+	QC IIISPECTOI
Doc/Data															
Equip/Tooling												·			
Handling/Pre															
Material															
Operator							ŀ							İ	. •
Offset/Setup														ı	
Process				Ì											
Supplier														l	
Training				Ì			İ								
Transport															•
Unapproved															
							FAI	ULT CAT	EGORY		·				
Landir	ng Ge	ear				General				_				_	
į	E	Bending				Bend		Folio/P	rogram		c	Outside Dim	ensions	Pi	ressure/Forced
Į.		Centre No	t Concer	ntric		BOM/Route		Grain			c)ver/Under	tolerance	_ S	et-up
		Cracks				Broken/Damage/Defect		Hardwa	re		P	art Incorred	ct		emperature/Cure
		Crimp/Kin	k/Ripple	/Wave		Burrs		Inspecti	on Incomplete/U	nqualified	P	art Lost/Mi	ssing	٧	Veld
-		Cuffs				Contamination		Instruct	ions Incomplete/l	Unclear	P	art Moved		\w	Vrong Stock Pulled
	.]	rushing				Countersink		Misalig	ned/off center		P	ositioned V	Vrong		
[}⊦	leat Trea	t			Cut Too Short		Mislabe	led		P	ower Loss/	Surge	0	ther
]1:	nspection	Strip in	Tube		Drawing		Misread	I	_					
[//arks/Ch	atter			Drill Holes		Off-set							
		urning S	equence			Finish		Out of 0	Calibration						
	\neg	Turning Sequence Wave/Twist in Tube				Fit/Function		Out of S	equence		_				



DESIGN	DRAWN BY	DART AERO HAWKESBURY, O	SPACE LTD NTARIO, CANADA
CHECKED A	APPROVED	DRAWING NO.	REV. E
94	4	D3121	SHEET 6 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



D3121-15 BRACKET (SHOWN) D3121-16 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
 MIN ULTIMATE TENSILE = 150 ksi
 MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

Copyright @ 2002 by DART AEROSPACE LTD

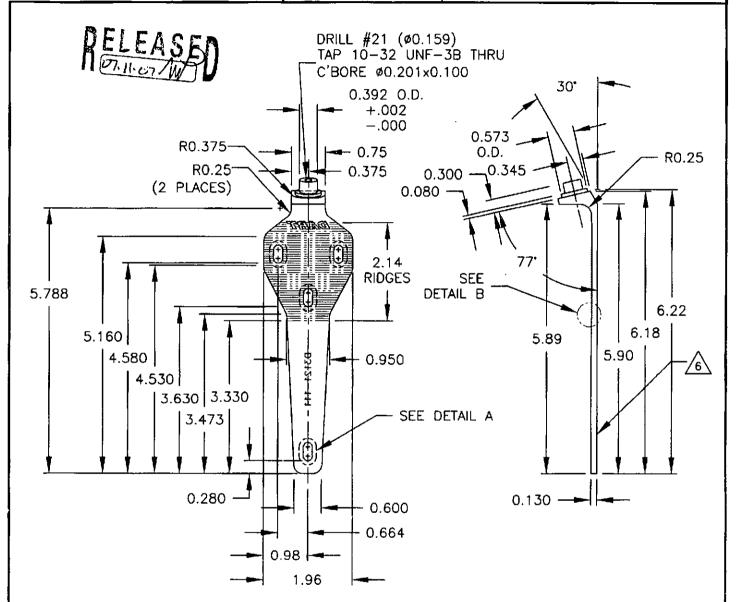
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DQA:			Date:										,	$^{\sim}$ \supset \wedge DT	
QA Closed:			Date:			WORK ORDER NON-	-C(ONFO	RMANCE / UPDATE	Mai	d Order un	odate only		AEROSPACE	
QA Closed.			Date.	·			-			VVOI	k Order up	date only			
Work Orde	er:					DISPOSITION			AGAINST	INST DEPARTMENT/PROCESS					
						Rework			Skid-tube Crosstube			Water Jet		Engineering	
Part N	No.					Scrap			Machining Small Fab	_	Prod. Eng. Coor.			Quality	
						Use-as-is		1	moforming Finishing	П	Rec/Store/Packaging			Other	
NCR I	No					Suspected Unapproved	Large Fab Composite		•	Supplier	-				
Root					Desci	ription of work order update	ı	Initial	Action		Sign &				
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	n	QC Inspector	
Design	Ш									1			ĺ		
Doc/Data	Ш														
Equip/Tooling	Ш														
Handling/Pre	Ш												ļ	•	
Material			i										i		
Operator	Ш														
Offset/Setup		•							1						
Process .	Ш										:		ļ	•	
Supplier										Ï					
Training	Ш									ł					
Transport	Ш									i				•	
Unapproved	Ш.														
						·· ··········	FAI	ULT CAT	TEGORY						
Landi	ng Gea					General		,		_		,			
	\vdash	nding			ļ	Bend	<u> </u>	1	Program	\vdash	Outside Dim		-	Pressure/Forced	
	${f oxed{H}}$		t Concen	itric		BOM/Route	<u> </u>	Grain			Over/Under	tolerance	\vdash	Set-up	
	⊢	acks				Broken/Damage/Defect		Hardwa		\vdash	art Incorrec		\vdash	Temperature/Cure	
i	_		k/Ripple,	/Wave		Burrs	L	Inspect	ion Incomplete/Unqualified	Щf	art Lost/Mi	ssing		Weld	
	Cu				\vdash	Contamination	<u> </u>	-{	tions Incomplete/Unclear	-	art Moved			Wrong Stock Pulled	
	—	ushing			\vdash	Countersink	<u> </u>	1	gned/off center	-	ositioned W	–			
	_	at Trea			<u> </u>	Cut Too Short		Mislabe			ower Loss/:	Surge	Ш	Other	
	\vdash		Strip in	Tube		Drawing		Misread	t						
	_	arks/Ch				Drill Holes	L	Off-set		_					
·	$\boldsymbol{\vdash}$	_	equence		<u> </u>	Finish		4	Calibration	_					
_	<u>l</u> w	Wave/Twist in Tube				Fit/Function		Out of Sequence							

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH



DESIGN 4	DRAWN BY	DART AEROSP HAWKESBURY, ONTAR	
CHECKED	APPROVED	DRAWING NO.	REV. E
#		D3121	SHEET 7 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



D3121-111 BRACKET

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

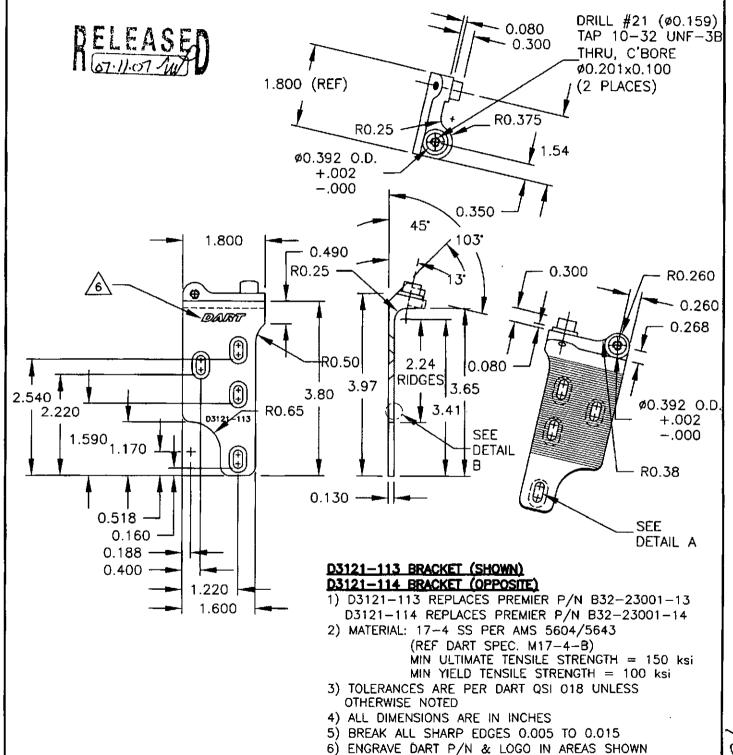
Copyright © 2002 by DART AEROSPACE. LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DQA:			Date:													
						WORK ORDER NON-	WORK ORDER NON-CONFORMANCE / UPDATE									
QA Closed:			Date:				1			W	ork Order u	odate only				
Work Orde	er:					DISPOSITION			AGAINST							
***************************************	_			-	!	Rework			Skid-tube Crosstube]	Water Jet	\neg	Engineering			
Part N	No.					Scrap			Machining Small Fab	Prod. Eng. Coor.			Quality			
	_					Use-as-is		Therr	noforming Finishing	Rec/Sto	ore/Packaging Other					
NCR I	No			- "	_	Suspected Unapproved Large Fab Composit]	Supplier				
Root					Desc	cription of work order update		Initial	Action		Sign &		T			
Cause		Date	Step	Qty		or non-conformance	Ch	nief _. Eng	Description		Date	Verification		QC Inspector		
Design						•										
Doc/Data			1		İ		:				<u> </u>					
Equip/Tooling																
Handling/Pre																
Material													- 1			
Operator	Ш															
Offset/Setup	Ŀ															
Process	Ш															
Supplier																
Training																
Transport	Ш			ľ												
Unapproved							L									
							FA	ULT CA	TEGORY							
Landi	ng G	ear				General		,		_	-	_	_			
	\vdash	Bending			<u> </u>	Bend	_	1	Program	L	Outside Dim	-	_ F	Pressure/Forced		
	LJ'	Centre No	ot Concer	ntric	\vdash	BOM/Route		Grain		\perp	Over/Under	tolerance	—	Set-up		
	-	Cracks			<u> </u>	Broken/Damage/Defect		Hardwa	are	\perp	Part Incorre	 	_ ¹	Temperature/Cure		
	Ц'	Crimp/Kir	ık/Ripple	/Wave		Burrs	<u> </u>	Inspect	ion Incomplete/Unqualified	\vdash	Part Lost/Mi	issing		Weld		
	\blacksquare	Cuffs			<u> </u>	Contamination		4	tions Incomplete/Unclear		Part Moved	L	\	Wrong Stock Pulled		
	-	Crushing			ļ	Countersink	L	1	gned/off center	<u></u>	Positioned V					
	-	Heat Trea				Cut Too Short	L	Mislabe			Power Loss/	Surge [Other		
	_	nspection	· ·	Tube	igspace	Drawing	L	Misrea								
	-	Marks/Ch			<u> </u>	Drill Holes	L	Off-set						· · · · · · · · · · · · · · · · · · ·		
	-	Turning S	-		<u> </u>	Finish	<u> </u>	Out of	Calibration							
	Wave/Twist in Tube					Fit/Function		Out of	Sequence							



DESIGN	DRAWN BY	DART AEROSP. HAWKESBURY, ONTARI	·
CHECKED	APPROVED	DRAWING NO.	REV. E
711			SHEET 8 OF 10
DATE		ΠLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



Copyright @ 2002 by DART AEROSPACE LTD

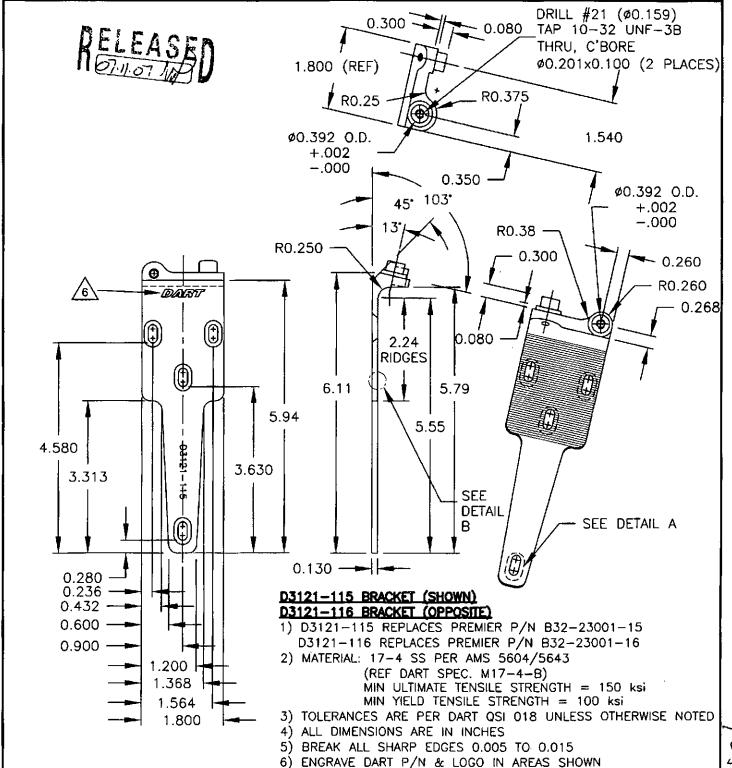
7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DQA:		_ Date:			· ΔΑΡΤ										
					WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE				AEROSPAC	E		
QA Closed:		Date:			***			<u> </u>	W	ork Order up	date only				
Work Orde	er:				DISPOSITION			AGAINST DEPARTMENT/PROCESS							
					Rework	1		Skid-tube Crosstu	ıbe]	Water Jet	Engineering			
Part N	o.				Scrap			Machining Small F	_ —	Pro	d. Eng. Coor.	Quality			
				_	Use-as-is			noforming Finish	ing	Rec/Stor	Other				
NCR N	lo			_	Suspected Unapproved			Large Fab Compos	ite]	Supplier		I		
Root		<u> </u>	ı	Descri	cription of work order update		nitial	Action		Sign &					
Cause	Date	Step	Qty		or non-conformance	!	ief Eng			Date	Verification	QC Inspector			
Design		<u> </u>									• • •				
Doc/Data					·										
Equip/Tooling															
Handling/Pre															
Material															
Operator															
Offset/Setup											<u>.</u>				
Process															
Supplier															
Training			1 1												
Transport															
Unapproved								<u></u>							
						FAI	ULT CA	TEGORY		•					
Landin	ig Gear				General	_	1			_	_	_			
	Bending				Bend		1	Program		Outside Dim	-	Pressure/Forced			
	Centre N	ot Concer	ntric	-	BOM/Route		Grain		\vdash	Over/Under	├ -	Set-up			
Ĺ	Cracks			Broken/Damage/Defect	<u> </u>	Hardwa		\perp	Part Incorred		Temperature/Cure				
	Crimp/Kink/Ripple/Wave			Burrs	<u> </u>	Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	Weld				
	Cuffs				Contamination	_	1	ions Incomplete/Unclear		Part Moved	L	Wrong Stock Pulled	l		
	Crushing			-	Countersink	<u> </u>		ned/off center	L	Positioned V					
	Heat Tre			-	Cut Too Short		Mislabe		L_	Power Loss/	Surge	Other			
		on Strip in	Tube	-	Drawing		Misread	d							
	Marks/C			-	Drill Holes	<u> </u>	Off-set								
	_	Sequence			Finish	L	4	Calibration							
- 1	Wave/Twist in Tube				Fit/Function Out of Sequence										



DESIGN	DRAWN BY		OSPACE LTD ONTARIO, CANADA
CHECKED	APPROVED,	DRAWING NO.	REV. E
4	-# -	D3121	SHEET 9 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:2



Copyright @ 2002 by DART AEROSPACE LTD

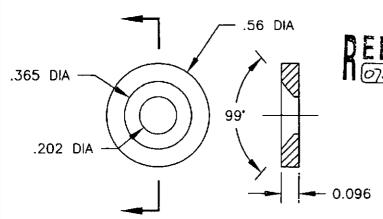
HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DQA:		Date:			WORK ORDER NON-CONFORMANCE / UPDATE									
QA Closed:		Date:			WORK ORDER NON-	-C(ONFO	RMANCE / UF		/ork Order up	odate only	AEROSPACE		
Work Orde	F.				DISPOSITION			·	AGAINST D	EPARTMENT,	/PROCESS			
WOOK OIGE					Rework	1	Skid-tube Crosstube			7	Water Jet	Engineering		
Part N	0				· —	Scrap			Machining Small Fab			Quality		
10111					Use-as-is				Finishing	-i	d. Eng. Coor. re/Packaging	Other		
NCR N	o				Suspected Unapproved	Large Fab Composite					Supplier			
Root	<u> </u>			Desc	ription of work order update		l Initial	Acti	ion	Sign &		T		
Cause	Date	Step	Qty		or non-conformance	Ch	nief Eng	Descri	iption	Date	Verification	QC Inspector		
Design	Î							,						
Doc/Data														
Equip/Tooling														
Handling/Pre														
Material												1		
Operator						l								
Offset/Setup														
Process														
Supplier														
Training [
Fransport														
Jnapproved														
						FA	ULT CAT	regory						
Landin	g Gear				General		_							
Ĺ	Bending				Bend		Folio/F	rogram		Outside Dim	ensions	Pressure/Forced		
	Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up		
	Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorred	ct	Temperature/Cure		
	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspecti	ion Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld		
L	Cuffs				Contamination		Instruct	ions Incomplete/U	nclear	Part Moved		Wrong Stock Pulled		
	Crushing				Countersink		Misalig	ned/off center		Positioned V	Vrong	_		
	Heat Trea	ıt			Cut Too Short		Mislabe	eled		Power Loss/	Surge	Other		
	Inspection	n Strip in	Tube		Drawing		Misread	d	_					
	Marks/Ch	atter			Drill Holes		Off-set							
	Turning S	equence			Finish		Out of (Calibration						
Γ	Turning Sequence Wave/Twist in Tube				Fit/Function		Out of 9	Sequence						

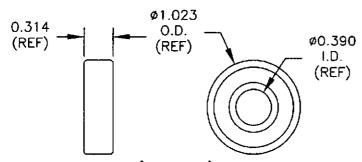
H:/FORMS/Quality Assurance\approved QA/NCRWO RevH





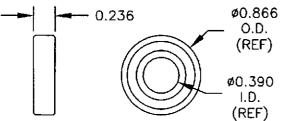
D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z
 - OR KML P/N 6900-ZZ ALL DIMENSIONS ARE IN INCHES

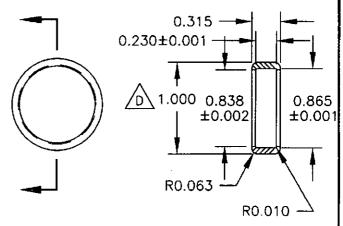
TAP 10-32 UNF-3A 0.080 0.050 TO 0.060

D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE

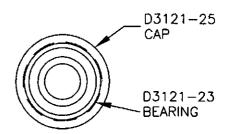
0.375 -

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-25 CAP (SCALE_1:1)

- 1) MATERIAL: DELRIN ROD, Ø1.25
 - (REF DART SPEC, M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES



D3121-241 BEARING ASSEBLY (SCALE 1:1)

Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DQA:		Date:			- wask appealant containing (uppeal										
QA Closed:		Date:			WORK ORDER NON-	-C(ONFO	RMANCE / UI		Vork Order u	odate only	AEROSPA	3 <i>E</i>		
					DISPOSITION					EPARTMENT	· · · · · · · · · · · · · · · · · · ·				
Work Orde	er:					,				_	,		_		
Part N	lo				Rework Scrap		Skid-tube Crosstube Machining Small Fab			Pro	Water Jet d. Eng. Coor.	Engineering Quality			
NCR N	lo			_	Use-as-is Suspected Unapproved				Finishing Composite	~ 					
Root				Descr	scription of work order update		Initial	Act	ion	Sign &					
Cause	Date	Step	Qty		or non-conformance	Ch	nief Eng	Descr	ription	Date	Verification	QC Inspector			
Design															
Doc/Data															
quip/Tooling]				
Handling/Pre											[
Material															
Operator]													
Offset/Setup		<u> </u>													
Process															
Supplier															
Training [ļ		
fransport		i													
Jnapproved					:						ļ				
						FAI	ULT CAT	EGORY				·····			
Landir	ng Gear				General										
	Bending				Bend		Folio/P	rogram	Γ	Outside Dim	ensions	Pressure/Forced	!		
	Centre No	ot Concer	ntric		BOM/Route	Г	Grain			Over/Under	tolerance	Set-up			
	Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorre	ct	Temperature/Cure	ڌ		
	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspecti	ion Incomplete/Un	nqualified	Part Lost/M	issing	Weld			
	Cuffs				Contamination		Instruct	ions Incomplete/U	Jnclear 📗	Part Moved	Ţ.	Wrong Stock Pulle	d		
	Crushing				Countersink		Misalig	ned/off center		Positioned V					
	Heat Trea	it			Cut Too Short		Mislabe	eled		Power Loss/	Surge	Other	;		
[Inspection	n Strip in	Tube		Drawing		Misread	1			_	-			
4.1.	Marks/Ch	atter			Drill Holes		Off-set								
	Turning S	equence			Finish		Out of 0	Calibration			-				
	Wave/Twist in Tube				Fit/Function		Out of 9	Sequence				-			

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH